

WHAT IS CLAIMED IS:

1. An inspection apparatus for inspecting a circuit wiring on a circuit board, said inspection apparatus comprising:

5        supply means for supplying an electric signal to one of the ends of a circuit wiring and varying a voltage in said circuit wiring;

      sensor means including a plurality of sensor elements arranged in an array, each of said sensor elements being adapted to generate an inspection signal in response to voltage variation of a conductor adjacent thereto;

10       sensor element select means for selecting at least one sensor element adjacent to the other end of said circuit wiring among said plurality of sensor elements; and

      output means for outputting the inspection signal from said selected sensor element.

15       2. An inspection apparatus as defined in claim 1, wherein

      said supply means is adapted to supply the electric signal to selected one of a plurality of circuit wirings on said circuit board,

      said sensor element select means is adapted to select all of the sensor elements adjacent to respective ends of said plurality of circuit wirings, and

20       when the inspection signal is generated in at least one of said sensor elements selected by said sensor element select means, said output means is adapted to output said inspection signal.

25       3. An inspection apparatus as defined in claim 1, wherein said sensor element select means includes a first switching means for controlling the connection between each of said sensor elements and the ground, and a second switching means for controlling the connection between each of said sensor elements and said output means.

4. An inspection apparatus as defined in claim 1, which further includes detect means for

detecting a disconnection in said circuit wiring according to the inspection signal output from said output means.

5 5. An inspection system for inspecting a circuit wiring on a circuit board, said inspection system comprising a plurality of inspection apparatuses each as defined in either one of claims 1 to 3, said inspection apparatuses being adapted to be disposed opposed to the circuit board.

10 6. An inspection system as defined in claim 5, which further includes a universal tester adapted to be connected to the plurality of inspection apparatuses.

7. An inspection method for inspecting a circuit wiring on a circuit board by using sensor means including a plurality of sensor elements arranged in an array, each of said sensor elements being adapted to generate an inspection signal in response to voltage variation  
15 of a conductor adjacent thereto, said inspection method comprising the steps of:

supplying the electric signal to one of the ends of the circuit wiring and varying a voltage in said circuit wiring;

selecting at least one sensor element adjacent to the other end of said circuit wiring among said plurality of sensor elements; and

20 detecting a disconnection in said circuit wiring according to an output signal output from said sensor element selected in said step of selecting at least one sensor element.

8. An inspection method as defined in claim 7, wherein a plurality of circuit wirings on the circuit board are simultaneously inspected by arranging said sensor means in the plural  
25 number.